Custo Fr No. 36441

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Under the Paperwork ersons are required to res	pond to	a collection of		Application Number	10/	619,253	
information unless it contain	ns a val	id OMB control nur	nber.	Filing Date	Jul	y 15, 2003	
TRAN	SMI	ΓTAL		First Named Inventor	Cr	ooke et al	
F	ORN	i		Group Art Unit			
(to be used for all correspondence after initial filing)			Examiner Name		-		
Total Number of Pages in	this Sut	omission	12	Attorney Docket Number	ISI	PH-0590U	S.P1
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Response to under 37 CF		_					
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I hereby certify that this c postage as first class mai	orrespo il in an e	ndence is being fa envelope addresse	acsimile ed to: Co	transmitted to the USPTO or deposit ommissioner for Patents, P.O. Box 14	ted witl 450, Al	h the United Sta exandria, VA 22	tes Postal Service with sufficient 313-1450 on this date:
Typed or printed name	•	Janet Larson					
Signature		gane	ŧ 🗀	tan	Date	e	10/08/2003

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231

MI TANGENERS ISPH-0590US.P1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : 10/619,253 Confirmation No.:

Applicant : ISIS Pharmaceuticals, Inc.

Filed: : July 15, 2003

TC/A.U. :

Examiner :

Customer No. : 36441

Title : ANTISENSE MODULATION OF STEAROYL COA

DESATURASE EXPRESSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicant submits to the Examiner the attached Form PTO/SB/08A/B document listing and this paper pursuant to 37 CFR § 1.56 and § 1.97-1.98. Form PTO/SB/08A/B and this paper identify documents previously cited in US Patent Application No. 09/918,187, filed July 30, 2001.

Certificate of Mailing under 37 CFR 1.8

on	10/8/2003
	gand Jam
	Signature
	Janet Larson

ISPH-0590US.P1 PATENT

According to 37 CFR § 1.98(d), Applicant has not enclosed copies of any US patents, publications, or other documents listed herein, which listed items were previously cited by or submitted to the US Patent and Trademark Office in prior parent US Patent Application No. 09/918,187, filed July 30, 2001. The prior parent patent application is relied upon herein for an earlier priority date under 35 USC § 120.

The Director is hereby authorized to charge any deficiency in any fees due with the filing of this paper or credit any overpayment in any fees to our Deposit Account Number 08-3040.

REMARKS

Listed below is a previously filed, and co-pending, US patent application. This application and the present application are commonly owned.

US Patent Application No. 09/918,187, filed July 30, 2001

(US Patent Publication No. US-2003-0083282-A1, published May 1, 2003)

Listed below are documents cited in the International Search Report dated April 16, 2003 in the related International Patent Application No. PCT/US02/22676, filed July 16, 2003. A copy of the Report is enclosed.

AB US Patent No. 5,801,154, issued September 1, 1998

AN International Patent Publication No. WO-00/09754, published 02-24-2000

ISPH-0590US.P1 PATENT

MILNER et al., "Selecting Effective Antisense AAW Reagents on Combinatorial Oligonucleotide Arrays", Nature Biotechnol., 15:537-541 (June 1997)

The month of publication for documents AT, AW, and AAU could not be determined. The years of publication for documents AT and AW are sufficiently earlier than the effective US filing date and/or the foreign priority date of the present application so that the particular month of publication of the documents is not in issue (MPEP 609).

The Examiner is respectfully requested to consider the enclosed document identified in this paper and in the attached Form PTO/SB/08A/B during the course of examination of this application.

Respectfully submitted,

HOWSON AND HOWSON Attorneys for Applicant

By Mary E. Bak

Registration No. 31,215 Spring House Corporate Center Box 457 Spring House, PA 19477 (215) 540-9200



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Substitute	e for form 1449	bstitute for form 1449A/PTO			Complete if Known	
	·		Application Number	10/619,253		
			DISCLOSURE	Filing Date	July 15, 2003	·
STA	TEMEN.	Г ВҮ	APPLICANT	First Named Inventor	Crooke et al.	
				Group Art Unit		
(1	Use as many sl	neets as	necessary)	Examiner Name		
Sheet	1	of	4	Attorney Docket Number	ISPH-0590US.P1	

	U.S. PATENT DOCUMENTS							
Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where			
Initials*	No.1	Number-Kind Code ^{2(f known)}	MM-DD-YYYY Applicant of Cited Document		Relevant Passages or Relevant Figures Appear			
	AA	US-2002-0151018	10-17-2002	PROUTY et al.				
	AB	US-5,801,154	09-01-1998	BARACCHINI et				
			05 01-1998	al.				

Examiner	Cite	Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant	
Initials*	No.1	Country Code ³ - Number ⁴ -Kind Code ⁵ (if known)		MM-DD-YYYY	Passages or Relevant Figures Appear CHAVALI et al.	Passages or Relevant
	AL	EP-238 198-A2	09-23-1987	CHAVALI et		
				al.		
	AM	WO-99/63979	12-16-1999	HABIB NAGY		<u> </u>
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	AN	WO-00/09754	02-24-2000	JOHNSON &		
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Translation is attached.

Translation is attached.
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Complete if Known Substitute for form 1449B/PTO Application Number 10/619,253 INFORMATION DISCLOSURE Filing Date July 15, 2003 STATEMENT BY APPLICANT First Named Inventor Crooke et al. Group Art Unit (Use as many sheets as necessary) Examiner Name Sheet ISPH-0590US.P1 Attorney Docket Number

		NONPATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
	AR	BENE et al., "Cloning and Characterization of the Human	1
		Stearoyl-CoA Desaturase Gene Promoter: Transcriptional	
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		and Repression by Polyunsaturated Fatty Acids and	
		Cholesterol", Biochem. and Biophys. Res. Commun.,	
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	AS	DIOT et al., "Stearoyl-CoA Desaturase 1 Coding Sequences	
		and Antisense RNA Affect Lipid Secretion in Transfected	1
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	AW	NTAMBI, "The Regulation of Stearoyl-CoA Desaturase (SCD)",	
		Prog. Lipid. Res., 34(2):139-150 (1995)	

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ſ	Examiner Signature	
- 1	Examine Signature	Date
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		Commercia

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Applicant's unique citation designation number (optional). Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The Information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 USC 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETE FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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Substitute	e for form 14	49B/PTO			Complete if Known	
	·		Application Number	10/619,253		
			DISCLOSURE	Filing Date	July 15, 2003	
STA	STATEMENT BY APPLICANT			First Named Inventor	Crooke et al.	
				Group Art Unit		·
	(Use as many sheets as necessary)			Examiner Name		
Sheet	3	of	4	Attorney Docket Number	ISPH-0590US.P1	

		NONPATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
-	AX	SESSLER et al., "Regulation of Stearoyl-C-A Desaturase 1 mRNA Stability by Polyunsaturated Fatty Acids in 3T3-L1 Adipocytes", J. Biol. Chem., 271(47):29854-29858 (November 22, 1996)	
	AY	SINGH et al., "Differential Effects of Rexinoids and thiazolidinediones on Metabolic Gene Expression in Diabetic Rodents", Mol. Pharmacol., 59:765-773 (April 2001)	
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	AAT	GREEN et al., "Antisense Oligonucleotides: An Evolving Technology for the Modulation of Gene Expression in Human Disease", 191(1):93-105 (July 2000)	-

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1	Examiner Signature	Date
L		Considered

^{*} EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		•		Application Number	10/619,253	
			DISCLOSURE	Filing Date	July 15, 2003	
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				Group Art Unit		
	(Use as ma	ny sheets as	necessary)	Examiner Name		
Sheet	4	of	4	Attorney Docket Number	ISPH-0590US.P1	

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·Examiner Initials*	Cite No.1	Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item, (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²	
	AAU	JEN et al., "Suppression of Gene Expression by Targeted Disruption of Messenger RNA: Available Options and Current Strategies", Stem Cells, 18:307-319 (2000)		
	AAV	BRANCH, "A Good Antisense Molecule is Hard to Find", TIBS, 23: 45-50 (February 1998)		
	AAW	MILNER et al., "Selecting Effective Antisense Reagents on Combinatorial Oligonucleotide Arrays", Nature Biotechnol., 15:537-541 (June 1997)		

Examiner Signature		
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